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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,198	09/29/2003	James Patrick Clinch	140/40652/O&T 975	2676

279 7590 10/20/2004

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EXAMINER

MITCHELL, KATHERINE W

ART UNIT PAPER NUMBER

3677

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/674,198

Applicant(s)

CLINCH ET AL.

Examiner

Katherine Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/12/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 19-23 and 25 is/are rejected.
- 7) ☒ Claim(s) 14-18, 24 and 26-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. with the action
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Claim Rejections - 35 USC § 102***

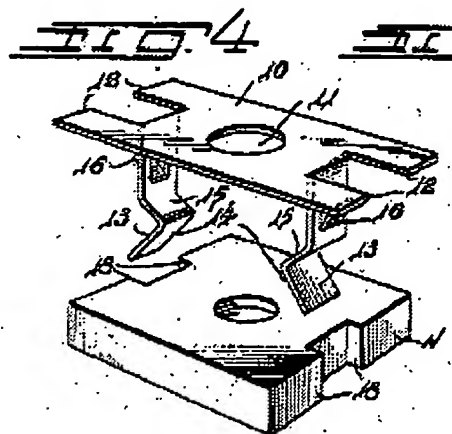
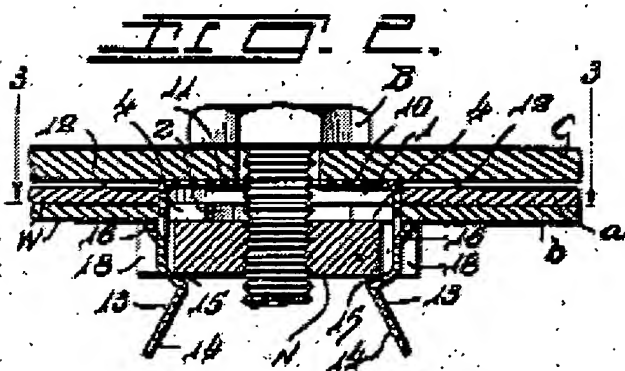
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13 and 19-22 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Tinnerman USP 2303148, hereafter called '148.

Re claims 1 and 10 and 22: '148 in Figs. 1-4 teaches a nut (N) enclosed by a cage member (item having arms 13, base 10, aperture 11 shown in Fig 4) which is further described in page 2 col 1 line 33- page 2 col 2 line 42 has having a body configured to engage the nut member such that the nut member is suspended off said base portion. The inwardly bent sections of arms 13 engaging notch 18 will inherently serve to suspend the nut off the base.



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Further regarding claim 10: Fig 4 shows the assembly including nut member N having an aperture (see Fig 4 showing threaded aperture in N extending at least partly through) and cage member.

Further regarding claim 22: Fig 2 shows the combination including

- Workpiece C having first and second surfaces and an aperture therethrough (the first surface is the bottom surface of C as shown in Fig 2 which is directly adjacent base 10. The second surface is the upper surface as shown in Fig 2, which is directly adjacent bolt head)
- nut member N having an aperture (see Fig 4 showing threaded aperture in N extending at least partly through) and
- cage member associated with said first surface of workpiece c
- a fastener (bolt B with head and elongated shank clearly shown in Fig 2)

Re claims 2 and 11: Fig 4 shows arms 13 extending from base 10.

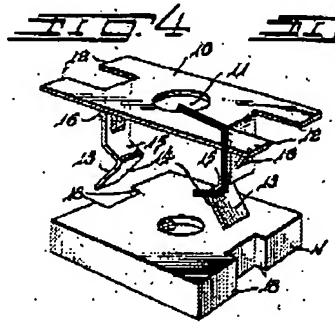
Re claims 3 and 12: Fig 4 and page 2 col 1 lines 42-44 teach 2 arms opposite each other.

Re claims 4 and 13: Fig 4 shows a generally rectangular base (10 without extensions 12) which has 4 corners, with one arm extending from one corner and the other arm extending from another corner.

Re claim 5: Fig 4 shows the opposite arms defining an opening therebetween, said opening sized to receive a portion of said nut member therethrough when the nut is suspended above the base by said two arms.

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Re claims 6: each arm has a generally C-shaped portion positioned opposite one another and defining said opening. C shape is outlined below:



Re claims 7-8 and 19-20 and 25: Page 2 col 1 lines 36-40 teach that the arms are formed of a flexible material, allowing the nut member to be positioned above the base of said body when said arm is moved.

Re claims 9 and 21: The cage body limiting the range of motion of the nut in at least one dimension while allowing access to the nut aperture is taught in page 2 col 1 lines 25-32 and 59-65.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tinnerman USP 2303148, hereafter called '148. As discussed above, '148 teaches all the elements except welding the cage member to the first surface of said workpiece. '148 teaches in page 2 col 1 lines 5-15 that welding is well known in the art of fastener

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connections. '148 features a temporary attachment means specifically to facilitate ease of reuse and removal. However, if a permanent attachment was desired, '148 teaches that welding is well-known. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to weld the cage member to the workpiece if a permanent, rather than temporary, attachment is required.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection. However, examiner notes that the definition of "suspend" provided:

**sus·pend** (se-spënd<sup>1</sup>) *verb*

**sus·pend·ed, sus·pend·ing, sus·pends** *verb, transitive*

4. To hang so as to allow free movement: *suspended the mobile from the ceiling.*

5. To support or keep from falling without apparent attachment, as by buoyancy: *suspend oneself in the water.*<sup>1</sup>

does not require hanging, as support without apparent attachment is an accepted definition.

### ***Allowable Subject Matter***

6. Claims 14-18, 24, and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The previously indicated allowability of claims' 2-8 and 10-13 and 19-23 and 25 subject matter is withdrawn per the art rejection provided above.

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<sup>1</sup> *The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction and distribution restricted in accordance with the Copyright Law of the United States. All rights reserved.

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***Conclusion***

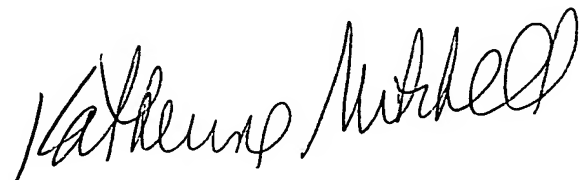
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine Mitchell whose telephone number is (703) 305-6713. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kwm  
10/16/2004



Katherine Mitchell

AU 3677